bridging the gap

Research Informing Policies & Practices
for Healthy Youth

Executive Summary

School Policies and Practices to Improve Health and Prevent Obesity: National Elementary School Survey Results

VOLUME 2

2006-2007
2007-2008
2008-2009
2009-2010
SCHOOL YEARS

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About Bridging the Gap

Bridging the Gap is a nationally recognized research program of the Robert Wood Johnson Foundation dedicated to improving the understanding of how policies and environmental factors affect diet, physical activity and obesity among youth, as well as youth tobacco use. The program identifies and tracks information at the state, community and school levels; measures change over time; and shares findings that will help advance effective solutions for reversing the childhood obesity epidemic and preventing young people from smoking. Bridging the Gap is a joint project of the University of Illinois at Chicago's Institute for Health Research and Policy and the University of Michigan's Institute for Social Research. For more information, visit *www.bridgingthegapresearch.org.*

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Executive Summary

In the United States, nearly 20 percent of children ages 6 to 11 are obese, and an additional 16 percent are overweight.[1,2] The dramatic rise in childhood obesity rates over the past generation is clearly associated with environmental changes that do not support healthy eating habits or regular physical activity.[3-5]

Schools play a key role in promoting children's health. Research shows that the school food environment impacts students' dietary behavior[6,7] and weight outcomes.[8] As such, experts and children's health advocates have been working with policymakers to make schools healthier for students. School-based strategies for preventing and reducing childhood obesity include: serving more nutritious foods and beverages during meals; removing sugar-sweetened beverages, candy and junk foods from campus; offering high-quality physical education; and providing opportunities for students to be active before, during and after school.[9-11]

As directed by the Healthy, Hunger-Free Kids Act of 2010,[12] the U.S. Department of Agriculture (USDA) is working to finalize updated nutrition standards for reimbursable school meals. The law authorizes an increase in federal funding for school lunches that meet the new standards. The law also gives USDA the authority to update nutritional standards for competitive products—those foods and beverages sold through vending machines, stores, à la carte lines and fundraisers.[13] USDA is expected to issue its proposed rule for competitive foods and beverages in early 2012.

Federal policies also have potential to help promote physical activity among students. Reauthorization of the Elementary and Secondary Education Act provides policymakers with an important opportunity to strengthen provisions that will improve physical activity practices in our nation's schools. While no timeline is set for reauthorization, Congress and the President have indicated that education reform is a priority. The challenge lies in educating policymakers about the importance of including physical education and physical activity as components of reform. State laws requiring a specific amount of physical activity at school are significantly associated[14] with whether schools offer elementary school students the nationally-recommended amounts of recess and physical education—that is, 20 minutes of recess per day[15,16] and 150 minutes of physical education per week.[17-19]

Given the critical role schools play in addressing the childhood obesity epidemic, it is essential to monitor schools, track changes in their practices, and examine how they are implementing federal, state and/or local policies. This allows us to evaluate any additional changes that may be needed, and helps inform the development and implementation of pending and existing policies at all levels.

Report Overview

This report provides updated results from one of the most comprehensive studies of health-related policies and practices in U.S. elementary schools to date, which was released in November 2010.[20] The major findings and trends presented in this report describe issues relevant to childhood obesity for four school years, from 2006–07 to 2009–10.

Topics covered in annual surveys by Bridging the Gap include school meals, competitive foods and beverages (those sold or served outside of meal programs), physical education, and other physical activity opportunities during and after school hours. Progress made by schools to implement provisions required by the federal wellness policy mandate also is summarized.

This report offers timely insights for USDA to consider as it continues implementation of the Healthy, Hunger-Free Kids Act of 2010 and helps inform future policies that aim to prevent obesity and improve children's diets, physical activity levels and overall health. Data presented in this report:

- *help document how elementary schools implemented district wellness policies during the first four years following the implementation deadline of the wellness policy mandate;*
- *provide guidance for local, state and federal policy-makers about successes and areas where new policies may be needed to strengthen existing efforts; and*
- *help school administrators, school board members and parents benchmark their own school's progress and identify areas of greatest progress and weakness.*

Our results describe practices that ultimately impact approximately 21 million K–5 students each year. Data are weighted to reflect the percentages of students nationwide who attended an elementary school that engaged in the practices referenced in our survey.

Key findings presented in this report focus on public elementary schools. We also include findings from corresponding practices in a nationally-representative sample of private schools. Because private schools often do not have districts that set policies, many of the opportunities for improving health-related practices in private schools are different from those in public schools. For this reason, findings from private schools are presented in a separate section of this report.

This report concludes with Table 1.1 which summarizes key practices for the 2006–07 and 2009–10 school years. Additional information, including results for all four school years and complete data for private elementary school students, is available at *www.bridgingthegapresearch.org/research/elementary_school_survey.*

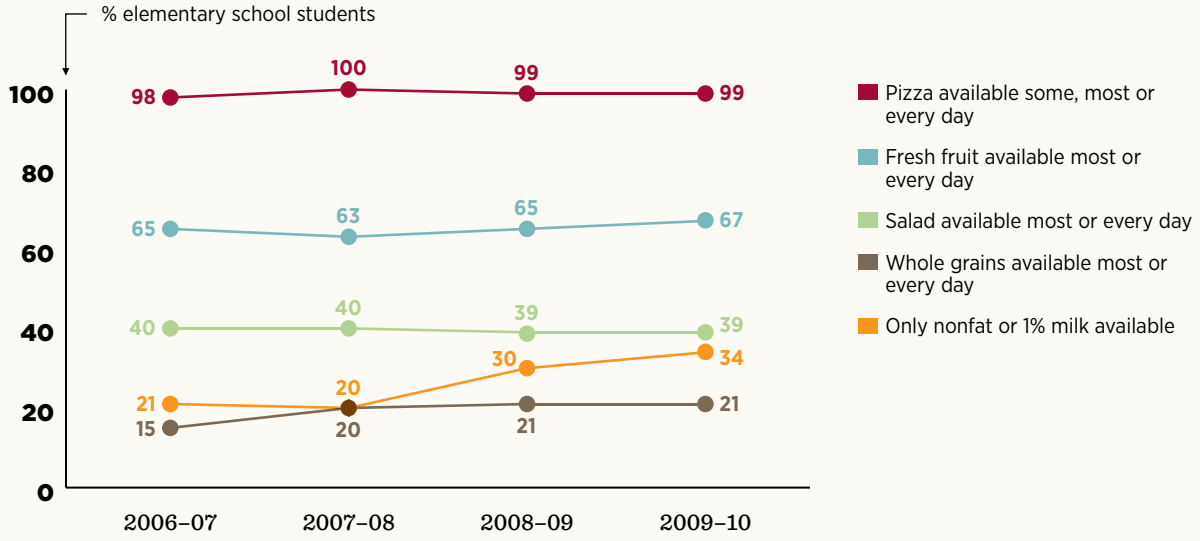
Major Findings and Trends

Since our study began in 2006–07, U.S. public and private elementary schools have made some changes to better support healthy eating, but the vast majority have made little to no progress when it comes to promoting physical activity among students. Many schools have made healthier foods and beverages more available, but most public elementary school students still have easy access to unhealthy foods and beverages on campus throughout the school day. Very few students have the opportunity to get enough physical activity to satisfy the minimum recommendations set by the federal government and other leading authorities. Our findings show that current practices in many elementary schools are not consistent with national recommendations for nutrition or physical activity.

Nutrition: School Meals

Public elementary schools have demonstrated some progress in making healthier foods and beverages more available through the National School Lunch Program, yet little has been done to limit the availability of products that are high in fat, sugar and/or sodium. Provisions of the Healthy, Hunger-Free Kids Act of 2010 have the potential to help improve the nutritional quality of meals. For example, USDA is working to finalize updated nutrition standards for school meals. Further, schools are improving accountability practices to ensure that meal pricing is in line with the actual cost of preparing meals. This will help schools pay for the costs associated with purchasing more nutritious foods and preparing healthier meals.

FIGURE 1 Items Served in Lunch Meals Offered at Schools Participating in the National School Lunch Program



Differences between 2007–08, 2008–09 and 2009–10 versus 2006–07 were significant at $p<.05$ for whole grains.

Differences between 2008–09 and 2009–10 versus 2006–07 were significant at $p<.05$ for lowfat milk.

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2012.

Since 2006–07, elementary schools have made whole grain products and low-fat milks more available during lunch, but there has been no increase in the availability of salads or fresh fruits.

Key Findings

The following section describes key findings among public elementary school students from the 2006–07 to 2009–10 school years.

Lunch Items Offered by Schools that Participated in the National School Lunch Program

Higher-fat foods, such as pizza and fries, continue to be widely available at lunch. During 2009–10, almost all public elementary school students (99%) had pizza available some, most or every day, and nearly three of four students (72%) were offered deep-fried potato products, such as fries or tater tots, some, most or every day.

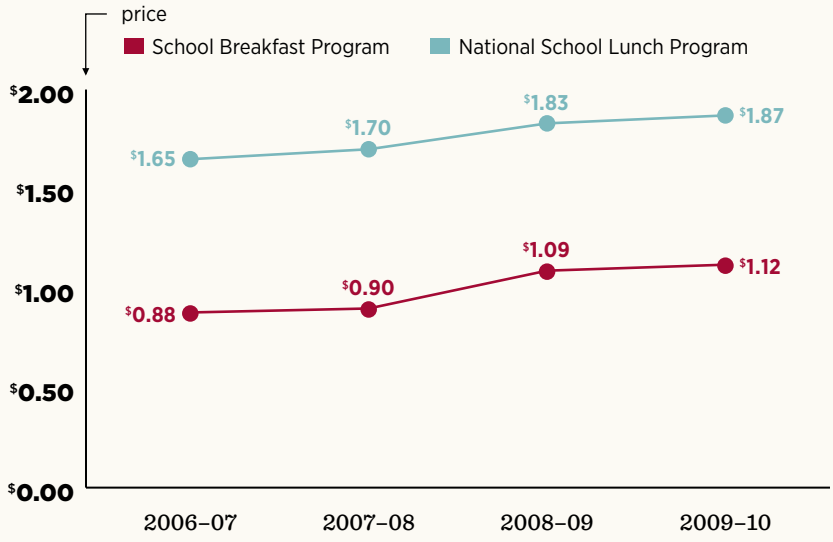
The availability of some healthier foods and beverages increased over time. From 2006–07 to 2009–10, the percentage of public elementary school students who had whole grain products available most days or every day increased from 15 percent to 21 percent. Likewise, the percentage of public elementary school students who were offered only lower-fat milks (1% or nonfat) and did not have access to higher-fat milks (2% or whole milk) increased from 21 percent to 34 percent.

The availability of salads and fresh fruits did not change. The percentage of public elementary school students who were offered salads (pre-made or salad bars) remained constant at about 40 percent, while about two-thirds of students had fresh fruit available for lunch during the four-year period.

Meal Prices

The average amount charged for a full-priced meal through the School Breakfast Program and the National School Lunch Program increased over time. From 2006–07 to 2009–10, the average price for breakfast increased from $0.88 to $1.12, and the average price for lunch increased from $1.65 to $1.87.

FIGURE 2 Average Cost of a Full-Priced Meal through the School Breakfast Program and National School Lunch Program



The average amount charged for a full-priced meal through the School Breakfast Program and the National School Lunch Program has increased significantly since 2006–07.

Differences between 2008–09 and 2009–10 versus 2006–07 were significant at $p<.05$ for the School Breakfast Program.

Differences between 2007–08, 2008–09 and 2009–10 versus 2006–07 were significant at $p<.05$ for the National School Lunch Program.

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2012.

Participation in the Team Nutrition Program

School participation in USDA's Team Nutrition program has been—and remains—modest. In 2009–10, 37 percent of public elementary school students attended a school that participated in the program, statistically unchanged from 40 percent in 2006–07. Previous analyses based on these data showed that schools participating in the Team Nutrition program were more likely to offer healthier lunch items, including salads, fresh fruits, and whole grains, and less likely to offer unhealthy foods, such as baked goods and salty snacks, for lunch.[21]

School Gardens and Farm-to-School Programs

From 2006–07 to 2009–10, the percentage of public elementary school students attending a school with a garden increased from 12 percent to 20 percent, and the percentage attending a school that participated in a farm-to-school program increased from 5 percent to 18 percent.

Policy Opportunities

Improve the Nutritional Quality of School Meals

School meals should provide more nutritious foods and fewer unhealthy, high-calorie options, such as pizza, fries and higher-fat milks. Such changes are consistent with recommendations by the Institute of Medicine (IOM)[22] for increasing the availability of fruits, vegetables and whole grains; decreasing saturated fat, trans fat, added sugars and salt; and limiting milk to 1% or nonfat options.

As directed by the Healthy, Hunger-Free Kids Act of 2010, USDA is working to finalize nutrition standards for breakfast and lunch meals which closely reflect the IOM recommendations. It is critical that these efforts continue swiftly and that the final standards are as rigorous as possible to ensure that students have more healthy options at school.

Increase Federal Reimbursement Rates for School Meals

Offering more fruits, vegetables and whole grains and fewer entrees that are high in fat and sodium would greatly improve the nutritional quality of school meals. Because such changes will increase schools' food service costs, it is critical that Congress fully fund the increased federal reimbursement rate for school lunches included in the Healthy, Hunger-Free Kids Act of 2010. Funding should also be provided to enhance the quality of school breakfasts.

Create More Equitable Financing Structure for Revenues Generated by Paid Meals

In June 2011, USDA issued an interim final rule on the provisions of the Healthy, Hunger-Free Kids Act of 2010 related to school food service revenue for paid meals and competitive foods. Schools and districts are in the process of implementing these changes which will give school food service programs additional resources to purchase and prepare healthy foods. This is an important strategy for addressing the increased costs associated with the proposed nutrition standards for school meals, including replacing outdated kitchen equipment and purchasing healthier foods.

Increase Technical Assistance and Training for Food Service Providers and Staff

Funding through USDA's Team Nutrition grant program, as well as the National Food Service Management Institute, are essential for helping school food service personnel prepare and serve healthier meals. Continued—and, ideally, expanded—financial support for such programs will allow for additional improvements in the nutritional quality of school meals, and further dissemination of these resources can help reach schools that have not yet implemented changes. The federal government and states should provide training and technical assistance to help food service staff prepare nutritious meals that are appealing to students. The Healthy, Hunger-Free Kids Act of 2010 included an authorization of $50 million for such efforts.

Nutrition: Competitive Foods and Beverages

Competitive foods and beverages—those sold or served outside of school meal programs—remain widely available in elementary schools. Further, student access to competitive beverages and à la carte lines both have increased significantly since 2006–07. While most schools offer a variety of competitive products, students typically purchase unhealthy items, such as candy, cookies, brownies and carbonated soda.[23] As directed by the Healthy, Hunger-Free Kids Act of 2010, USDA is expected to release its proposed nutrition standards for competitive foods in early 2012.

Key Findings

The following section describes key findings among public elementary school students from the 2006–07 to 2009–10 school years.

Competitive Foods

The availability of foods in competitive venues remained steady from 2006–07 to 2009–10. About half of public elementary school students could purchase food products from any competitive venue on campus, including vending machines, school stores, snack bars or à la carte lines. Junk foods were widely available—virtually all of the schools that sold competitive foods to students offered high-fat, salty or sweet products in those venues.

Competitive Beverages

There was a significant increase in the availability of beverages in competitive venues over the four-year period. The percentage of public elementary school students who could purchase beverages from any competitive venue on campus, including vending machines, school stores, snack bars or à la carte lines rose from 49 percent in 2006–07 to 60 percent in 2009–10. However, access to *only* healthy beverages—those recommended by the Institute of Medicine (IOM), including water, 100% juice and/or nonfat or 1% milk—also increased significantly during that time, up from 10 percent to 19 percent of public elementary school students. In effect, schools' efforts to make only healthy beverages available counteracted the increase in the prevalence of competitive beverage venues overall. As a result, the school beverage environment was not made significantly less healthy, but there also was no significant improvement.

À la Carte Lines

À la carte lines in the cafeteria are offered during the lunch period and represent a substantial source of the competitive items described above. À la carte sales frequently include ice cream, chips and pastries. From 2006–07 to 2009–10, access to à la carte lines in school increased significantly, from 42 percent to 52 percent of public elementary school students. These findings suggest that a growing number of elementary schools have introduced à la carte lines in the cafeteria since the 2006–07 school year.

Classroom Practices

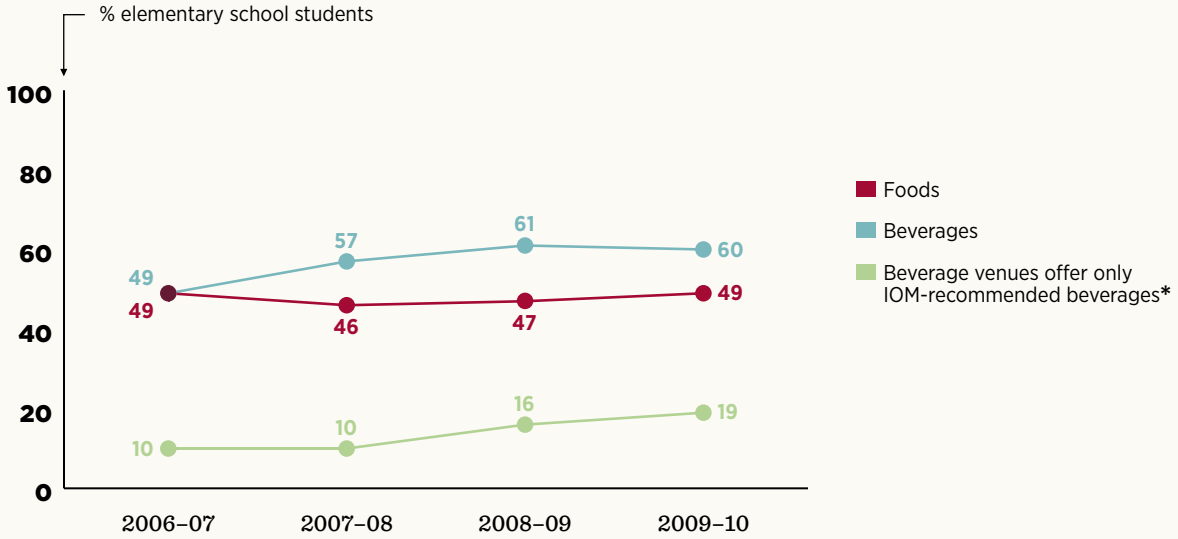
The use of food as a reward in the classroom is still a common practice in many schools, but it has decreased over time. In 2006–07, 32 percent of public elementary school students attended a school where food, such as candy, was *not* used as reward for good behavior, increasing to 41 percent in 2009–10. Likewise, the percentage of public elementary school students in schools where food was *not* used as a reward for academic performance increased from 35 percent to 42 percent over the four-year period. During 2009–10, nearly half of public elementary school students attended a school that banned or discouraged sweets during birthday parties (45% of students) or during holiday parties (46% of students).

Policy Opportunities

Ensure USDA Guidelines for Competitive Foods and Beverages Meet or Exceed the Current Dietary Guidelines for Americans

Although current federal regulations on the nutritional quality of competitive foods are weak and outdated, the Healthy, Hunger-Free Kids Act of 2010 gives USDA the authority to update national nutrition standards for all foods and beverages served and sold in schools outside of the meals programs. The 2010 Dietary Guidelines for

FIGURE 3 Availability of Competitive Foods and Beverages on Campus



Data reflect foods and/or beverages available in competitive venues, including vending machines, stores, snack bars, and à la carte lines.

*The IOM recommendations for beverages sold in competitive venues include water, 100% juice and/or nonfat or 1% milk.

Differences between 2008–09 and 2009–10 versus 2006–07 were significant at $p<.05$ for IOM–only beverages.

Differences between 2007–08, 2008–09 and 2009–10 versus 2006–07 were significant at $p<.05$ for competitive beverages.

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2012.

In 2009–10, 60 percent of public elementary school students were able to purchase beverages from à la carte lines, vending machines, school stores or snack bars on campus. This represented a significant increase from 49 percent in 2006–07.

Americans, as well as IOM standards for competitive foods,[24] which recommend limits on fat, sugar, calories and serving sizes, should serve as guides for USDA as it works to update national nutritional standards for these products. It is crucial that the final regulations meet or exceed the most recent Dietary Guidelines for Americans, are comprehensive, and apply to the entire campus for the full school day.

Encourage Schools to Implement Nutrition Guidelines for Competitive Products

As USDA prepares to issue and finalize a rule specific to competitive foods and beverages, schools, districts and states can begin to update their own nutritional guidelines for competitive products, using the Dietary Guidelines for Americans and the IOM standards to guide their efforts. This will help ensure that all foods and beverages available to students contribute to a healthy diet.

Schools that have replaced less-healthy competitive products with healthier items have reported no loss in revenues.[25] In fact, adding healthier competitive foods can even increase participation in the National School Lunch Program and attract new revenue.[26,27] Improving the nutritional quality of products offered in competitive food venues also could help to reinforce practices encouraged by school-based nutrition education.

Limit the Availability of Unhealthy Products in the Classroom

Establishing and strengthening school, district and state policies regarding the use of non-food options for student rewards and classroom parties would remove a significant source of high-calorie, low-nutrient products in elementary schools.

Physical Activity

Apart from an increase in school participation in the Safe Routes to School Program, there has been virtually no change in school practices related to physical activity during the past four years. There is still abundant room to improve school-based policies and practices that support and encourage physical activity. With upcoming Congressional review of the Elementary and Secondary Education Act, federal lawmakers have the opportunity to strengthen provisions that will improve physical activity practices in schools.

Key Findings

The following section describes key findings among public elementary school students from the 2006–07 to 2009–10 school years.

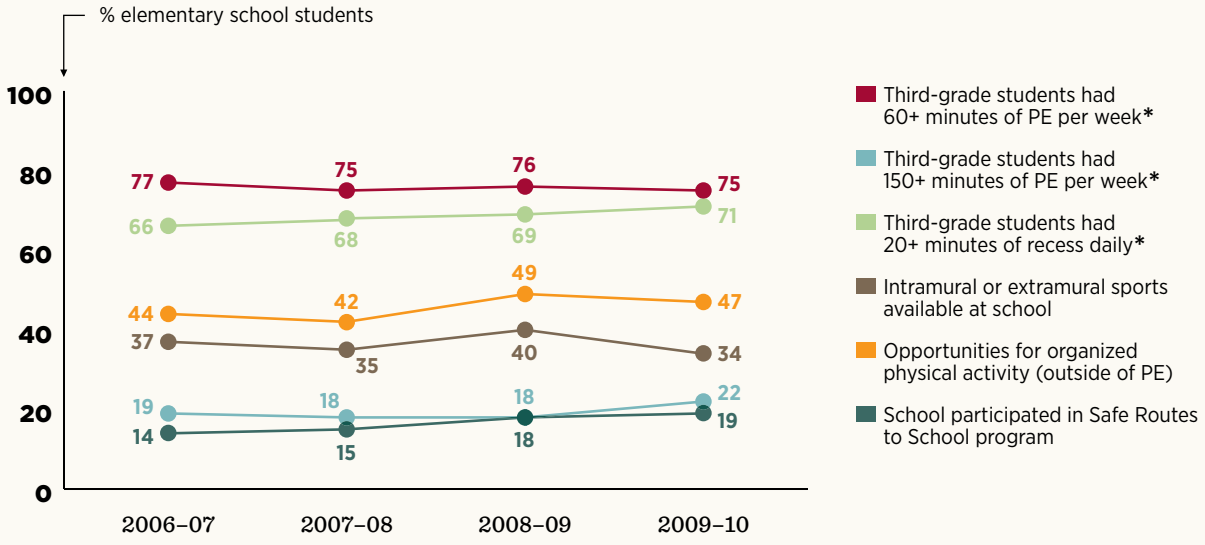
Physical Activity Opportunities During the School Day

Overall, there have been very few changes in practices that support physical activity during the school day since 2006–07.

Only 22 percent of public elementary school students were in a school that met the National Association for Sport and Physical Education (NASPE) standard of 150+ minutes of physical education per week in 2009–10, up slightly from 19 percent in 2006–07. Three in four public elementary school students attended a school that offered at least 60 minutes of physical education per week, which can be considered a minimum threshold for physical education. This also means that one-quarter of public elementary school students did not receive even a minimal amount of physical education.

In 2009–10, 71 percent of public elementary school students received adequate recess time (at least 20 minutes daily). This percentage did not change over the four-year period. Other opportunities for organized physical activity during the school day, such as activity

FIGURE 4 Opportunities for Physical Activity During and Outside of the School Day



*Third-grade students identified because school practices may vary by grade.

Differences between 2008–09 and 2009–10 versus 2006–07 were significant at $p<.05$ for the Safe Routes to School program.

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2012.

In 2009–10, only 22 percent of public third-grade students were offered at least 150 minutes of physical education per week, as recommended by NASPE.

breaks, were limited. Only 47 percent of public elementary school students had such opportunities during 2009–10, statistically unchanged from 44 percent in 2006–07.

In 2009–10, one-quarter of public elementary school students attended a school with no gymnasium or one that was reported as inadequate. At the same time, 14 percent of public elementary school students had an administrator who indicated that inadequate indoor facilities were a barrier to implementing high-quality physical education programming.

Physical Activity Opportunities Outside of the School Day

During 2009–10, only 34 percent of public elementary school students attended a school that offered either intramural or extramural sports, statistically unchanged from 37 percent during 2006–07.

While school administrators were not specifically asked about joint use agreements, they were asked whether organizations or individuals were allowed to use school facilities. In 2009–10, 86 percent and 79 percent of public elementary school students, respectively, attended a school that allowed organizations or individuals to use its outdoor or indoor facilities.

Active Transportation

School participation in the Safe Routes to School program increased over the four-year period. In 2009–10, 19 percent of public elementary school students attended a school that participated in the program, up from 14 percent in 2006–07. The percentage of students who walked or bicycled to school remained stable at about 20 percent over the four-year period.

Policy Opportunities

Support High-Quality Physical Education in Schools

Districts and schools should develop and enforce physical education policies that align with evidence-based guidelines, such as providing daily classes that allow students at least 150 minutes of physical education per week and engage students in moderate-to-vigorous physical activity. Ensuring access to high-quality physical education classes will help students meet national recommendations for daily activity and learn lifelong skills that contribute to healthy behavior. Attending to the adequacy of school facilities—including indoor facilities, such as the school gymnasium—may be necessary to remove barriers to implementing physical education programming.

Additionally, as USDA develops model policies and technical assistance for local wellness policies in accordance with the Healthy, Hunger-Free Kids Act of 2010, it should consider requiring districts to build on the required goals for physical activity and set specific goals for physical education.

Include Active Physical Education as a Core Requirement in the Elementary and Secondary Education Act

As Congress reauthorizes the Elementary and Secondary Education Act, it should consider making physical education a core and mandatory requirement to ensure that all students are getting adequate amounts of exercise and that physical education classes follow evidence-based guidelines and are taught by certified teachers.

Increase Opportunities for Physical Activity Outside of Physical Education

Ensuring that all students have adequate daily recess and other opportunities to be active before, during and after the school day will help more children meet the U.S. Department of Health and Human Services recommendation for at least 60 minutes of moderate-to-vigorous physical activity each day. These opportunities, such as intramural sports or physical activity clubs, are especially important in lower-income or underserved communities with populations at greatest risk for obesity.

Support Walking and Bicycling to School

Increasing participation in programs such as Safe Routes to School and providing crossing guards and bike racks at school could increase active commuting. As new schools are built, planners should consider school location and sidewalk connections to residential areas.[28]

Increase Implementation of Joint Use Agreements

Joint use agreements make school grounds accessible to schoolchildren and other community residents outside of school hours and help form school-community partnerships to make parks and recreational spaces available for children whose schools lack adequate facilities. The adoption of such agreements is highly recommended for increasing physical activity among children, especially in low-income, inner-city and rural settings.[29] Local policy officials should facilitate joint use agreements between municipalities and schools and should adopt policies to address liability issues that might block implementation of joint use agreements, when necessary.[30]

The National Policy and Legal Analysis Network to Prevent Childhood Obesity provides resources to help develop and implement joint use agreements, including model agreements, an overview of liability risks in all 50 states and a checklist for creating an agreement.[a]

Wellness Policies

Schools have made progress to implement some provisions required by the federal wellness policy mandate in 2006–07. There has been more progress in developing goals for nutrition education and physical activity, but less movement to actually develop guidelines for meals and competitive foods. National studies have found that district wellness policies remain relatively fragmented and weak, and provisions for implementation and reporting are minimal.[31] It is essential for districts to continue to strengthen policy provisions and support school-level implementation to ensure that these policies are effective.

Key Findings

The following section describes key findings among public elementary school students from the 2006–07 to 2009–10 school years.

School-Level Awareness and Implementation of Required Wellness Policy Provisions

Among schools that had a wellness policy in 2009–10, 60 percent of public elementary school students attended a school that had developed goals for nutrition education, up from 51 percent in 2006–07. Similarly, 74 percent of public elementary school students attended a school with goals for physical activity, up from 55 percent in 2006–07. While these data show improvements, they also indicate that many schools have not yet established these policy requirements.

The wellness policy mandate also required schools to have guidelines for school meals and competitive foods and beverages. In 2009–10, only 66 percent of public elementary school students attended a school that had developed guidelines for school meals and only 55 percent attended a school with guidelines for competitive foods and beverages. These findings do not indicate whether schools actually implemented or enforced the guidelines. In addition, 28 percent of public elementary school students attended a school where the administrator did not know whether there were nutritional guidelines for competitive food and beverages at the district level.

Opportunities for Wellness Policy Development and Implementation

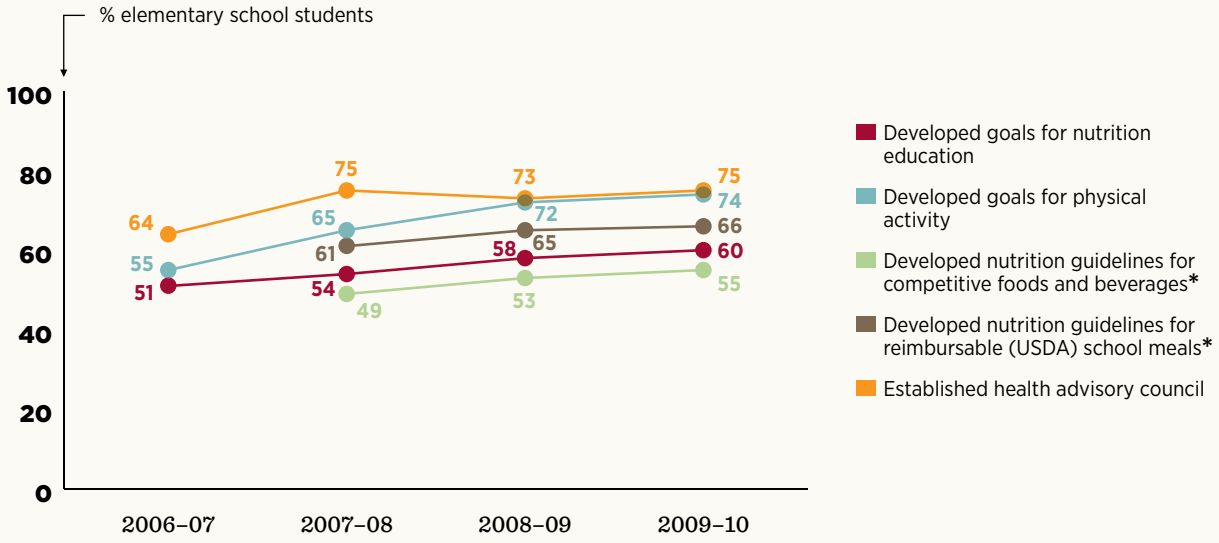
Maximize Opportunities Included in the Healthy, Hunger-Free Kids Act of 2010

Model wellness policies and technical assistance developed by USDA should reflect the intent of the Healthy, Hunger-Free Kids Act of 2010, which calls for:

- *requiring the measurement and evaluation of the wellness policies;*

[a] More information about NPLAN's join use agreement resources is available at *www.nplanonline.org/nplan/joint-use.*

FIGURE 5 Implementation of Required Wellness Policy Provisions, by Schools with a Wellness Policy



Data reflect goals or guidelines developed at the school level or district level, presented only for schools where the survey respondent reported that a wellness policy was in place at the school level or district level.

*Data not available for 2006–07.

Differences between 2009–10 versus 2006–07 were significant at $p<.05$ for developed goals for nutrition education.

Differences between 2007–08, 2008–09 and 2009–10 versus 2006–07 were significant at $p<.05$ for developed goals for physical activity and for a health advisory council.

Differences between 2009–10 versus 2007–08 were significant at $p<.05$ for developed nutrition guidelines for competitive foods and beverages.

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2012.

Schools have made progress to implement some provisions required by the federal wellness policy mandate, but continue to struggle with those related to competitive foods. In 2009–10, only 55 percent of public elementary school students attended a school that had developed guidelines for competitive foods and beverages.

- *making the content of wellness policies more transparent to help parents, students and others in the community better understand the provisions; and*
- *providing resources and training to help with designing, implementing, promoting, disseminating and evaluating wellness policies.*

To ensure that wellness policies are implemented successfully at the local level, USDA should develop best practices and model policies, as well as regulations that allow districts and schools to tailor the provisions to meet their individual needs.

Schools should take the lead in implementing their district wellness policy, ensure timely review and provide feedback about their implementation efforts to the school community.

Ensure that Schools and Districts Have Adequate Resources to Implement Wellness Policies

Lack of funding, insufficient staff time and limited support from district and school administrators have been identified as barriers for implementing district wellness policies.[32] Governments at all levels will need to reallocate and maximize resources to help districts and schools implement wellness policy provisions.

Increase Awareness and Implementation of Guidelines for Competitive Foods and Beverages

Districts that have developed nutrition guidelines as part of their wellness policy should ensure that school-level personnel are aware of the guidelines and should support school-based efforts to implement the guidelines. As USDA prepares to issue and finalize a rule specific to competitive foods and beverages, districts can begin to update their wellness policy provisions regarding competitive products, using the Dietary Guidelines for Americans and the IOM standards to guide their efforts. This will help ensure that all foods and beverages available to students contribute to a healthy diet.

Private Schools

One of every eight U.S. elementary school students attends a private school.[33] These students have a significantly less healthy school environment than public elementary school students. A comparison of public and private elementary school students from 2006–07 to 2009–10 found that private elementary school students:

- *more often were served meals sourced from commercial vendors, including fast-food outlets.*
- *paid more for the School Breakfast Program and National School Lunch Program meals, where available.*
- *were more likely to have sugary beverages available on campus and more likely to have less-healthy snack foods in competitive venues.*
- *spent less time in physical education class, but were more likely to have daily recess and intramural or extramural sports.*

Opportunities for Improvement

Encourage Grassroots Change in Private Schools

Private schools vary tremendously in organization, size, philosophy and other important characteristics. Federal legislation, such as the Elementary and Secondary Education Act, generally does not apply to private schools. Further, because so few private schools participate in the USDA meal programs, most are not required to comply with the federal wellness policy mandate. Policymaking at private schools is typically done by officials at each school, making it difficult to develop and implement federal and state laws that could have a wide-reaching impact on private school students.

Private elementary school students are faring even worse than those in public schools when it comes to having a healthy environment. Sharing these findings and maintaining a national media focus on school practices will help to inform school boards, administrators, teachers and parents of the need to garner community-based support for changes in private school policies and practices.

Next Steps

Since 2006–07, public and private elementary schools across the country have made an effort to make healthier foods and drinks more available, but have done very little to limit foods that are high in fat, sugar and/or sodium. There also has been a significant lack of progress in helping students be active during and after the school day. Our data identify specific policies and practices that need to be changed to create a healthier school environment for students.

The Bridging the Gap team has been collecting nationally representative data on health-related practices in elementary, middle and high schools annually since the 2006–07 school year, which was the first year of the federal wellness policy mandate. Annual surveys by Bridging the Gap will continue to track changes in state and district policies and school practices relevant to student health. We also will monitor the impact of these changes to identify areas where progress is being made as well as areas where particular need remains. These findings will provide timely guidance for the continued implementation of the Healthy, Hunger-Free Kids Act of 2010.

In addition, ongoing tracking will help assess the impact of the Healthy, Hunger-Free Kids Act of 2010, the reauthorization of the Elementary and Secondary Education Act, and key state and local policies that impact children's overall health. Future reports also will examine links between adopted wellness policies, their level of implementation in schools, and secondary school students' self-reported physical activity levels, dietary patterns and body mass indices to identify policies with greatest potential to reverse the childhood obesity epidemic.

Summary of Health-Related Policies and Practices in Elementary Schools

Table 1.1 summarizes data for the 2006–07 and 2009–10 school years. All data are weighted to reflect the percentages of public and private elementary school students nationwide who were impacted by these practices. Data for additional school years, other survey topics and demographic sub-sample comparisons are available at *www.bridgingthegapresearch.org/research/elementary_school_survey.*

TABLE 1.1 Summary of Elementary School Policies and Practices by School Type

School Meals	PUBLIC 06–07	PUBLIC 09–10	PRIVATE 06–07	PRIVATE 09–10
School Breakfast Program available at school				
Yes	85%	86%	6%	7%
Students who were offered full-price School Breakfast Program meal in each price range				
$1.00 or less	73%	49%	92%	40%
$1.01 or more	27%	51%‡	8%	60%†
Average price for full-price School Breakfast Program meal	$0.88	$1.12	$0.83	$1.25
National School Lunch Program available at school				
Yes	97%	93%‡	33%	26%
Students who were offered full-price National School Lunch Program meal in each price range				
$2.00 or less	87%	72%	60%	43%
$2.01 or more	13%	28%‡	40%	57%*
Average price for full-price National School Lunch Program meal	$1.65	$1.87	$2.05	$2.27
French fries available in National School Lunch Program meals				
Every day, most days or some days	N/A	72%	N/A	79%
Pizza available in National School Lunch Program meals				
Every day, most days or some days	98%	99%	100%	98%
Salad bar or pre-made salad available in National School Lunch Program meals				
Most or every day	40%	39%	33%	36%
Whole grains available in National School Lunch Program meals				
Most or every day	15%	21%†	16%	9%
Fresh fruit available in National School Lunch Program meals				
Most or every day	65%	67%	42%	39%
Only nonfat or 1% milk available in National School Lunch Program meals (2% or whole milk not offered)				
Yes	21%	34%‡	37%	39%
Lunch period lasts at least 30 minutes				
Yes	67%	46%‡	58%	40%‡

Significance of change from 2006–07 is indicated with *$p<.05$; †$p<.01$; ‡$p<.001$.

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2012.

TABLE 1.1, CONTINUED

School Meals (CONTINUED)	PUBLIC 06–07	PUBLIC 09–10	PRIVATE 06–07	PRIVATE 09–10
Timing of lunch and mid-day recess				
Lunch before recess	N/A	52%	N/A	64%
Lunch after recess		19%		19%
No mid-day recess		15%		10%
Varies by class		14%		7%
Supplier of school meals (check all that apply)				
School system food service	83%	81%	50%	33%
Food service company	17%	17%	21%	17%
Other	4%	2%	34%	49%
Were foods from outside commercial sources (e.g., pizza, sub sandwiches, fast food) offered at lunch one day per week or more?				
Yes	12%	11%	47%	38%*
Were full-service kitchen facilities available at school?				
Yes	78%	78%	71%	74%
School garden				
Yes	12%	20%‡	9%	18%†
Farm-to-school program				
Yes	5%	18%‡	0%	13%‡
Participated in Team Nutrition (among schools that participated in the School Breakfast Program or National School Lunch Program)				
Yes	40%	37%	35%	34%
School or district set food and beverage prices to encourage consumption of healthier items				
Some/a lot	N/A	27%	N/A	25%

Competitive Foods	PUBLIC 06–07	PUBLIC 09–10	PRIVATE 06–07	PRIVATE 09–10
Had vending machines available on campus				
Beverages	16%	13%	30%	28%
Foods	3%	4%	12%	10%
Foods and/or beverages	17%	13%	31%	25%
Had à la carte lines available				
Beverages	36%	50%‡	29%	42%†
Foods	40%	39%	33%	30%
Foods and/or beverages	42%	52%†	36%	43%*
Had school stores or snack bars available on campus				
Beverages	11%	15%*	25%	26%
Foods	18%	20%	30%	26%
Foods and/or beverages	19%	22%	32%	30%
Had competitive foods or beverages in any venue (vending, à la carte, stores and/or snack bars) on campus				
Beverages	49%	60%‡	63%	65%
Foods	49%	49%	58%	50%
Foods and/or beverages	57%	65%*	68%	69%

Significance of change from 2006–07 is indicated with *$p<.05$; †$p<.01$; ‡$p<.001$.

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2012.

TABLE 1.1, CONTINUED

Competitive Foods (CONTINUED)	PUBLIC 06–07	PUBLIC 09–10	PRIVATE 06–07	PRIVATE 09–10
Healthy foods (e.g., fresh fruit, vegetables, salad) available in any competitive venue				
Yes	38%	36%	41%	33%
Less-healthy foods (e.g., high-sugar, high-fat and/or high-sodium foods) available in any competitive venue				
Yes	46%	47%	56%	49%
Only beverages recommended by the IOM were available in competitive venues[b]				
	10%	19%‡	6%	11%*
Healthy beverages (e.g., bottled water, 100% fruit juice, low-fat milk) available in any competitive venue				
Yes	48%	57%†	59%	61%
Sugar-sweetened beverages (e.g., soda, sport drinks) available in any competitive venue				
Yes	17%	14%	40%	35%
Low-calorie or no-calorie beverages (e.g., diet soda, "light" juices) available in any competitive venue				
Yes	19%	16%	39%	31%
2% or whole milk available in any competitive venue				
Yes	29%	32%	37%	35%
Bottled water available in any competitive venue				
Yes	37%	42%	52%	51%
Did school have an exclusive pouring contract with beverage distributor?				
Yes	11%	6%	15%	10%
No contract or no beverage vending	89%	94%	85%	90%
Did school receive incentives for beverage sales through vending machines?				
Yes	3%	1%	5%	4%
No	4%	3%	7%	4%
Don't know	4%	2%	3%	2%
N/A, no beverage vending	89%	94%	85%	90%
Types of advertising present in any locations on campus				
Soft drinks/fast food/candy	3%	4%	5%	5%
Milk	75%	85%‡	41%	54%†
Fruits/vegetables	79%	80%	47%	48%
Were teachers allowed to use food as a reward for good academic performance?				
No	35%	42%*	43%	50%
Were teachers allowed to use food as a reward for good student behavior?				
No	32%	41%†	41%	50%*
Were students allowed to keep water bottles at their desks?				
No	6%	7%	15%	9%

Significance of change from 2006–07 is indicated with *$p<.05$; †$p<.01$; ‡$p<.001$.

[b] The IOM recommendations for beverages sold in competitive venues include water, 100% juice and/or nonfat or 1% milk.

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2012.

TABLE 1.1, CONTINUED

Competitive Foods (CONTINUED)	PUBLIC 06–07	PUBLIC 09–10	PRIVATE 06–07	PRIVATE 09–10
Were beverages other than water regularly allowed in class?				
No	93%	91%	94%	96%
Were foods regularly allowed in class?				
No	78%	79%	87%	89%
Were there policies limiting sugary items during birthday parties?				
Prohibited schoolwide	N/A	10%	N/A	3%
Discouraged schoolwide		35%		30%
No policy or up to each teacher		55%		67%
Were there policies limiting sugary items during holiday parties?				
Prohibited schoolwide	N/A	7%	N/A	2%
Discouraged schoolwide		39%		31%
No policy or up to each teacher		53%		67%

Physical Activity and Physical Education	PUBLIC 06–07	PUBLIC 09–10	PRIVATE 06–07	PRIVATE 09–10
Were elementary school students required to take physical education (PE)?				
Yes	99%	99%	98%	98%
Was PE offered five days per week to third-grade students?[c]				
Yes	20%	21%	9%	13%
Did third-grade students receive 60+ minutes of PE per week?[c]				
Yes	77%	75%	74%	70%
Did third-grade students receive 90+ minutes of PE per week?[c]				
Yes	53%	54%	42%	42%
Did third-grade students receive 150+ minutes of PE per week?[c]				
Yes	19%	22%	10%	16%*
Number of days per week third-grade students had recess[c]				
None	5%	3%	2%	0%
One to four days per week	7%	11%	6%	6%
Five days per week	87%	85%*	92%	93%
Did third-grade students receive 20+ minutes of recess daily?[c]				
Yes	66%	71%	81%	85%
Were any sports (intramural or extramural) available at school?				
Yes	37%	34%	73%	77%
Were nontraditional PE activities (e.g., yoga, kick-boxing) available at school?				
Yes	16%	14%	21%	23%
Were opportunities for organized physical activities (outside of PE class) available during the school day?				
Yes	44%	47%	32%	34%
How adequate is the gymnasium?				
N/A, don't have	19%	18%	19%	15%
Not very adequate	11%	7%	5%	6%
Adequate	29%	32%	19%	23%
Very adequate	41%	43%	57%	56%

Significance of change from 2006–07 is indicated with *$p<.05$; †$p<.01$; ‡$p<.001$.

[c] Third-grade students identified because school practices may vary by grade.

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2012.

TABLE 1.1, CONTINUED

Physical Activity and Physical Education (CONTINUED)	PUBLIC 06–07	PUBLIC 09–10	PRIVATE 06–07	PRIVATE 09–10
How adequate are the playing fields?				
N/A, don't have	3%	5%	13%	11%
Not very adequate	14%	12%	13%	14%
Adequate	41%	42%	30%	33%
Very adequate	41%	42%	44%	42%
How adequate is the playground equipment?				
N/A, don't have	3%	3%	7%	9%
Not very adequate	16%	11%	11%	8%
Adequate	44%	46%	39%	38%
Very adequate	36%	40%	43%	46%
Barriers to implementing high-quality PE programming				
Lack of staff	20%	17%	12%	6%*
Inadequate indoor facilities	22%	14%‡	17%	12%
Inadequate outdoor facilities	12%	7%†	10%	7%
PE is not a priority for district	7%	3%*	1%	1%
Financial constraints	16%	18%	16%	16%
Competing demands for other subjects	26%	20%*	16%	15%
No state or district policies requiring PE	3%	1%*	2%	0%
Were students allowed to bicycle to school?				
No	28%	23%	32%	31%
Yes, in certain grades	23%	18%	24%	18%
Yes, all students	50%	59%	44%	51%
About what percentage of students walked or bicycled to school?				
Average	20%	22%	5%	7%
Perceived barriers to walking/bicycling to school[d]				
School is too far away	49%	48%	77%	73%
Traffic danger	56%	54%	79%	73%
Bad weather	18%	25%	19%	30%
Crime	14%	10%	20%	15%
Lack of sidewalks	34%	30%	30%	23%
No bike racks	19%	20%	27%	20%
No crossing guards	26%	24%	30%	29%
Was Safe Routes to School (or similar program) available at school?				
Yes	14%	19%*	4%	3%
Was a walking school bus available at school?				
Yes	3%	6%*	1%	0%
Were advertisements for sports and/or physical activity present in any locations on campus?				
Cafeteria	48%	49%	20%	27%
Elsewhere in school	52%	51%	40%	46%
Anywhere in school	76%	77%	51%	60%*
How often was student body mass index (BMI) measured/calculated?				
Never	50%	49%	77%	80%
Selected grades only	27%	31%	8%	10%
Annually for all students	23%	20%	15%	10%

Significance of change from 2006–07 is indicated with *$p<.05$; †$p<.01$; ‡$p<.001$.

[d] Percentage of principals who perceived barriers "to a great extent" or "to a very great extent."

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2012.

TABLE 1.1, CONTINUED

Physical Activity and Physical Education (CONTINUED)	PUBLIC 06–07	PUBLIC 09–10	PRIVATE 06–07	PRIVATE 09–10
Were results of student body mass index (BMI) measurements sent to parents?				
Yes	27%	29%	10%	11%
No	14%	15%	8%	5%
Measured but don't know whether reported	9%	7%	5%	4%
N/A, not measured	50%	49%	77%	80%
How often was student physical fitness measured?				
Never	26%	20%	40%	34%
Selected grades only	32%	33%	24%	22%
Annually for all students	42%	47%	36%	45%
Were results of student physical fitness testing sent to parents?				
Yes	41%	42%	26%	34%
No	21%	26%	20%	23%
Measured but don't know whether reported	12%	12%	14%	10%
N/A, not measured	26%	20%	40%	34%
Were organizations or individuals allowed to use *outdoor* facilities?				
Yes, organizations	N/A	47%	N/A	42%
Yes, individuals		5%		4%
Yes, both		34%		23%
No		14%		31%
Were organizations or individuals allowed to use *indoor* facilities?				
Yes, organizations	N/A	61%	N/A	54%
Yes, individuals		0%		3%
Yes, both		18%		19%
No		21%		24%

The following data show student exposure to each of the wellness policy provisions required as part of the Child Nutrition and WIC Reauthorization Act of 2004. Results are presented separately for schools with a wellness policy (WP) and those without (No WP).

Wellness Policies	PUBLIC WP 06–07	PUBLIC WP 09–10	PUBLIC No WP 06–07	PUBLIC No WP 09–10	PRIVATE WP 06–07	PRIVATE WP 09–10	PRIVATE No WP 06–07	PRIVATE No WP 09–10
Did school or district have goals for nutrition education?								
Yes, developed	51%	60%	16%	17%	48%	45%	9%	11%
Currently developing	26%	21%	16%	15%	33%	27%	11%	15%
No, not yet	16%	13%	59%	53%	18%	26%	77%	69%
Don't know	7%	6%	10%	16%	1%	2%	3%	5%
Did school or district have goals for physical activity?								
Yes, developed	55%	74%	24%	30%	55%	62%	22%	36%
Currently developing	27%	15%	16%	18%	33%	26%	18%	13%
No, not yet	12%	7%	55%	38%	11%	10%	60%	45%
Don't know	6%	5%	5%	14%	1%	3%	1%	7%
Did school offer formal classroom instruction on nutrition education?								
Yes	64%	67%	43%	57%	69%	78%	54%	60%

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2012.

TABLE 1.1, CONTINUED

Wellness Policies (CONTINUED)	PUBLIC				PRIVATE			
	WP		No WP		WP		No WP	
	06–07	09–10	06–07	09–10	06–07	09–10	06–07	09–10
Did school offer formal classroom instruction on physical activity, exercise and health-related fitness?								
Yes	82%	87%	69%	78%	79%	91%	63%	85%
Did school or district have guidelines for reimbursable school meals?								
Yes, developed	N/A	66%	N/A	36%	N/A	34%	N/A	6%
Currently developing		4%		6%		4%		2%
No, not yet		7%		25%		42%		80%
Don't know		22%		33%		20%		12%
Did school or district have nutrition guidelines for competitive foods and beverages?								
Yes, developed	N/A	55%	N/A	19%	N/A	32%	N/A	3%
Currently developing		6%		1%		7%		8%
No, not yet		12%		34%		47%		75%
Don't know		28%		46%		14%		14%
Did school or district have plans for evaluation and implementation of wellness policy?								
Yes, developed	N/A	49%	N/A	N/A	N/A	32%	N/A	N/A
Currently developing		18%				24%		
No, not yet		10%				35%		
Don't know		23%				9%		
Did school or district designate one or more persons with operational responsibility for ensuring that the wellness policy was implemented?								
Yes, school and district	N/A	19%	N/A	N/A	N/A	3%	N/A	N/A
Yes, district only		48%				8%		
Yes, school only		11%				55%		
No		13%				30%		
Don't know		10%				4%		
Did school or district have an ongoing health advisory council or an advisory group in place to make recommendations regarding nutrition and/or exercise for students?								
Yes	64%	75%	32%	39%	33%	39%	6%	10%

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2012.

Overview of Study Methods

This study is based on mail-back survey data gathered from principals, food service managers, and other staff at nationally representative samples of public and private elementary schools during the 2006–07, 2007–08, 2008–09, and 2009–10 school years. Because elementary schools vary in grade composition (e.g., pre-K–3, grades 2–5, K–6), we selected grade 3 as a proxy for sampling and weighting our data. All schools included at least one grade 3 class, and the third-grade student population at each school was used to develop weights that reflect the percentage of elementary school students nationwide who were impacted by the practices referenced in our survey.

Data are presented on the weighed percentage of students nationwide who were enrolled in a school with each policy or practice discussed. Because some schools included higher grades (particularly at smaller schools and private schools), most of our survey items asked respondents to provide information on practices relevant only to K–5 students, although for some topics such as recess and physical education, we asked about grade 3 specifically. Findings in this report are based on analyses of school-level practices that ultimately impacted approximately 21 million K–5 students each year.

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